

In the Claims

At page 20, line 1, please delete 'Claims' and substitute therefor --What is Claimed Is:-.

Please amend the claims as follows:

1. (Currently Amended) A method of magnetic resonance imaging of a sample, said method comprising:
 - i) administering a hyperpolarised MR imaging agent comprising non-zero nuclear spin nuclei into said-the sample;
 - ii) exposing said-the sample to a radiation at a frequency selected to excite nuclear spin transitions in said non-zero nuclear spin nuclei;
 - iii) detecting MR signals from said-the sample and utilising spectral-spatial excitation, in combination with line scanning, point scanning and/or steady state imaging techniques; and
 - iv) optionally generating an image, physiological data or metabolic data from said detected signals.
2. (Currently Amended) The method as claimed in claim 1 wherein step iii) is carried out after the agent has left the vascular bed of a subject.
3. (Currently Amended) The method as claimed in claim 1 ~~or 2~~ wherein for steady state imaging a fully balanced version of gradient sequences is used.
4. (Currently Amended) The method as claimed in ~~any of the claims 1 to 3~~ claim 1 wherein for steady state imaging FISP or PSIF pulse sequences with high flip angles are used.
5. (Currently amended) The method as claimed in ~~any of the claims 1 to 4~~ claim 1 wherein said non-zero nuclear spin nuclei are selected from the group consisting of ^1H , ^3He , ^3Li , ^{13}C , ^{15}N , ^{19}F , ^{29}Si , ^{31}P and ^{129}Xe .

6. Currently amended) The method as claimed in ~~any of the claims 1 to 5~~ claim 1 wherein said non-zero nuclear spin nuclei are selected from the group consisting of ^{13}C and ^{15}N , especially ^{13}C nuclei.

7. (Currently amended) The method as claimed in ~~any one of the claims 1 to 6~~ claim 1 wherein said MR imaging agent is artificially enriched with nuclei having a T_1 relaxation time of more than 5s.

8. (Original) The method as claimed in claim 6 wherein the MR imaging agent has an effective nuclei ^{13}C polarisation of more than 1%.

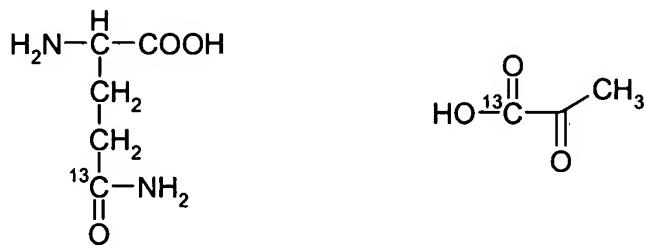
9. (Original) The method as claimed in claim 6 wherein the MR imaging agent is ^{13}C enriched at carbonyl or quaternary carbon positions.

10. (Original) The method as claimed in claim 9 wherein said ^{13}C enriched compound is deuterium labelled adjacent said ^{13}C nucleus.

11. (Currently amended) The method as claimed in ~~any one of claims 6 to 10~~ claim 6 wherein said ^{13}C nuclei are surrounded by one or more non-MR active nuclei or entities selected from the group consisting of O, S, C or a double or triple bond.

12. (Currently amended) The method as claimed in ~~any of the claims 1 to 11~~ claim 1 wherein step iii) utilises spectral-spatial excitation combined with a steady state imaging technique.

13. (Currently amended) The method as claimed in ~~any of the claims 1-12~~ claim 1 wherein said imaging agent comprises a compound selected from the following:



Remarks

Applicants have amended the specification to cross-reference the parent application which is a continuation of international application number PCT/NO02/00321 filed September 12, 2002 which claims priority to Great Britain Application 0122049.0 filed September 12, 2001. Applicants have also amended the specification to add the headings and arrange the text to be consistent with United States patent practice.

Applicants have amended claims 3-7 and 11-13 to more fully conform with U.S. practice and to delete multiple dependencies. Applicants respectfully submit that none of the amendments constitute new matter in contravention of 35 U.S.C. §132.

Applicants respectfully assert that all amendments are fairly based on the specification, and respectfully request their entry.

Applicants are submitting herewith a copy of the International Search Report, which issued on International Application number PCT/NO02/00321, of which the present application is a continuation. All of the publications cited in the International Search Report are listed on the attached Information Disclosure Statement in addition to references listed in the specification.

Applicants respectfully submit that the instant application is in condition for examination. Favorable action thereon is respectfully requested.

Appln. No. To Be Assigned
PreAmendment Dated:

Any questions with respect to the foregoing may be directed to Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,



Robert F. Chisholm
Registration No.: 39,939
Attorney for Applicants

Amersham Health, Inc.
101 Carnegie Center
Princeton, New Jersey 08540-6231
Tel: (609) 514-6405
Fax: (609) 514-6572

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